Amendments to the Specification:

Please replace the paragraph on page 4, lines 12-25, with the following paragraph:

In one embodiment, the methods of the invention can be used to recover or enrich one or more chaperone proteins and/or chaperone protein complexes from a sample by a method comprising placing the samples in a pH gradient, in the presence of an electric field, and collecting fractions of chaperone proteins from the gradient. Preferably, the technique of free solution isoelectric focusing (FS-IEF) is used to enrich chaperone proteins such as, calreticulin (CRT), hsp90, gp96, grp75/mt, hsp 72, hsp 60, and hsp70. FS-IEF is preferably conducted within a power range of 10-20 Watts. In one embodiment FS-IEF is performed in the presence of urea and detergent. In another embodiment FS-IEF is performed by applying a sample to a matrix comprised of a non-ionic or zwitterionic detergent and urea in the range of 4M-8M. Said matrix can also be comprised of charged particles *e.g.* ampholytes or Rotolytes®. In a particular embodiment the detergent is a combination of ~~Triton X-100~~ octylphenol ethylene oxide condensate (Triton X-100), ~~Triton X-114~~ octylphenoxypoly (ethyleneoxy) ethanol (Triton X-114), and ~~Igepal CA-630~~ tert-octylphenoxy poly(oxyethylene)ethanol (Igepal CA-630). In a further embodiment the detergent is 0.1% ~~Triton X-100~~ octylphenol ethylene oxide condensate, 0.1% ~~Triton X-114~~ octylphenoxypoly (ethyleneoxy) ethanol, and 0.1% ~~Igepal CA-630~~ tert-octylphenoxy poly(oxyethylene)ethanol. In another embodiment the matrix comprises salt *e.g.* sodium chloride.

Please replace the paragraph from page 5, line 27 to page 6, line 11, with the following paragraph:

The present invention also provides for compositions comprised of chaperone proteins, chaperone protein complexes, or aggregates thereof, wherein said chaperone proteins, chaperone protein complexes, or aggregates thereof, are enriched in a biological sample by subjecting the sample to IEF. Said compositions can be used to treat or prevent cancer, or any infectious disease. In a particular embodiment the invention provides a composition comprising a sample enriched in chaperone protein complexes wherein the sample is prepared by a method comprising subjecting a solution comprising chaperone protein complexes and a plurality of different proteins to free solution isoelectric focusing, and collecting one or more fractions with a pH from pH 4.5 to 6.5 wherein at least some of the proteins in the solution are present in fractions other than fractions of pH 4.5 to pH 6.5;

wherein the collected fractions comprise a mixture of chaperone protein complexes; and wherein said chaperone protein complexes in said sample are not purified to homogeneity. Preferably, the free solution isoelectric focusing is performed in the presence of urea and detergent. The urea can be present for example in the range of 4M-8M. The detergent can be present for example at concentration in the range of 0.1%-1.7%. The detergent is preferably non-ionic or zwitterionic *e.g.* ~~Triton X-100~~ octylphenol ethylene oxide condensate, ~~Triton X-114~~ octylphenoxypoly (ethyleneoxy) ethanol, and/or ~~Igepal CA-630~~ tert-octylphenoxy poly(oxyethylene)ethanol; in a specific embodiment each detergent can be present at 0.1%. The detergents are preferably removed from the fractions collected from FS-IEF, *e.g.*, by dialyzing the collected fractions against a buffer comprising phosphate buffered saline or water.

Please replace the two paragraphs from page 7, line 7 to page 8, line 6, with the following two paragraphs:

The invention also relates to a method of treating or preventing a type of cancer in a subject, wherein said method comprises subjecting a lysate of cells of a cancer of said type, or metastasis thereof, to FS-IEF; collecting one or more fractions with a pH from pH 4.5 to 6.5 which are enriched in chaperone protein complexes; optionally pooling said collected fractions; and administering said chaperone protein complexes present in said collected fractions to a patient to treat or prevent said cancer. Said subject can be any animal, preferably a mammal, more preferably a human. Said free solution isoelectric focusing can be performed in the presence of urea and detergent. The urea can be present in the range of 4M-8M. The detergent can be present at concentration in the range of 0.1%-1.7%. The detergent can be non-ionic or zwitterionic *e.g.* ~~Triton X-100~~ octylphenol ethylene oxide condensate, ~~Triton X-114~~ octylphenoxypoly (ethyleneoxy) ethanol, and/or ~~Igepal CA-630~~ tert-octylphenoxy poly(oxyethylene)ethanol. The detergents can be removed from the fractions collected from FS-IEF prior to use, *e.g.*, by dialyzing the collected fractions against a buffer comprising phosphate buffered saline or water. FS-IEF can be performed in the presence of a salt *e.g.* sodium chloride. The chaperone protein complexes can be present in aggregates that have a molecular weight that is greater than 100kD, 200kD, 300 kD, 400kD, or 500kD. The method of the invention further includes combining the chaperone protein complexes obtained in FS-IEF fractions with a biological response modifier *e.g.* IL-2, IL-4, IL-5, IL-6, IL-12, IL-15, GM-CSF.

The invention also relates to a method of treating or preventing a disease caused by an infectious agent, *e.g.* a virus, a bacterium, or a parasite, in a subject, wherein said method comprises subjecting a lysate of cells expressing an antigenic molecule displaying antigenicity of an antigen of said infectious agent to FS-IEF; collecting one or more fractions with a pH from pH 4.5 to 6.5 which are enriched in chaperone protein complexes; optionally pooling said collected fractions; and administering said chaperone protein complexes present in said collected fractions to a patient to treat or prevent said disease. Said cell lysate can be of cells transformed with a nucleic acid encoding said antigenic molecule or alternatively the cells can be infected with said infectious agent. Said FS-IEF can be performed in the presence of urea and detergent. The urea can be present in the range of 4M-8M. The detergent can be present at concentration in the range of 0.1%-1.7%. The detergent can be non-ionic or zwitterionic *e.g.* ~~Triton X-100~~ octylphenol ethylene oxide condensate, ~~Triton X-114~~ octylphenoxypoly (ethyleneoxy) ethanol, and/or ~~Igepal CA-630~~ tert-octylphenoxy poly(oxyethylene)ethanol. The detergents can be removed from the fractions collected from FS-IEF prior to use. FS-IEF can be performed in the presence of a salt *e.g.* sodium chloride. The method of the invention includes combining the chaperone protein complexes obtained in FS-IEF fractions for the treatment or prevention of a disease caused by an infectious agent with a biological response modifier *e.g.* IL-2, IL-4, IL-5, IL-6, IL-12, IL-15, GM-CSF.

Please replace the three paragraphs from page 13, line 18 to page 14, line 3, with the following three paragraphs:

Cells are homogenized by a motor driven glass teflon homogenizer at 4°C in a buffer consisting of 10 mM Tris/Cl (pH 7.4), 10 mM NaCl, 0.1% ~~Triton X-100~~ octylphenol ethylene oxide condensate, 0.1% ~~Triton X-114~~ octylphenoxypoly (ethyleneoxy) ethanol, 0.1% ~~Igepal CA-630~~ tert-octylphenoxy poly(oxyethylene)ethanol, leupeptin (2ug/ml), pepstatin A (1ug/ml), phenylmethylsulfonylfluoride (0.5mM), and one complete protease inhibitor cocktail tablet (Roche Molecular Biochemicals, Indianapolis, IND.). The cell lysate is then first centrifuged at 10,000g for 20-30 minutes at 4°C followed by harvesting the supernatant, and then further centrifuged at 100,000g for 60-90 minutes at 4°C followed by harvesting the supernatant.

The supernatant is dialyzed against a buffer consisting of 5mM Tris/Cl (pH 7.4), 5mM NaCl, 0.05% ~~Triton X-100~~ octylphenol ethylene oxide condensate, 0.05%

~~TritonX-114~~ octylphenoxypoly (ethyleneoxy) ethanol, 0.05% ~~Igepal CA-630~~ tert-octylphenoxy poly(oxyethylene)ethanol. The supernatant is then dialyzed against a buffer consisting of 2.5mM Tris/Cl (pH 7.4), 2.5mM NaCl, 0.025% ~~Triton X-100~~ octylphenol ethylene oxide condensate, 0.025% ~~TritonX-114~~ octylphenoxypoly (ethyleneoxy) ethanol, 0.025% ~~Igepal CA-630~~ tert-octylphenoxy poly(oxyethylene)ethanol. The supernatant is next dialyzed against a buffer consisting of 1.25mM Tris/Cl (pH 7.4), 1.25mM NaCl, 0.012% ~~Triton X-100~~ octylphenol ethylene oxide condensate, 0.012% ~~TritonX-114~~ octylphenoxypoly (ethyleneoxy) ethanol, 0.012% ~~Igepal CA-630~~ tert-octylphenoxy poly(oxyethylene)ethanol. The supernatant is finally dialyzed into water. The compositions of the various buffer and centrifugation conditions provided herein are not intended to be limiting. Various modifications of the lysis buffer, dialysis buffer, centrifugation parameters can be made by those skilled in the art in view of practical considerations.

In an alternative embodiment of the invention the supernatant is dialyzed directly against a buffer consisting of 1.25mM Tris/Cl (pH 7.4), 1.25mM NaCl, 0.012% ~~Triton X-100~~ octylphenol ethylene oxide condensate, 0.012% ~~TritonX-114~~ octylphenoxypoly (ethyleneoxy) ethanol, 0.012% ~~Igepal CA-630~~ tert-octylphenoxy poly(oxyethylene)ethanol and then into water.

Please replace the two paragraphs from page 14, line 21 to page 15, line 6, with the following two paragraphs:

In a specific embodiment solubility of the proteins in the supernatant is maintained by the addition of detergents, and urea, and preferably salt (*e.g.* sodium chloride), and ampholytes or other charged particles to the supernatant prior to FS-IEF. In such embodiment the concentration of urea in the supernatant that is applied to the FS-IEF apparatus is in the range of about 4M-8M. The concentration of detergent in the supernatant that is applied to the FS-IEF apparatus is preferably in the range of about 0.1%-1.7%. Any detergent can be used that prevents the precipitation of the proteins in the supernatant during FS-IEF. Preferably the detergents are zwitterionic or non-ionic detergents. Most preferably the detergents are ~~Triton X-100~~ octylphenol ethylene oxide condensate, ~~Triton X-114~~ octylphenoxypoly (ethyleneoxy) ethanol and/or ~~Igepal CA-630~~ tert-octylphenoxy poly(oxyethylene)ethanol. The detergents can be combined in any concentration so long as the final concentration is preferably 0.1% - 1.7%. As an example, but not as a limitation, ~~Triton X-100~~ octylphenol ethylene oxide condensate, ~~Triton X-114~~ octylphenoxypoly

(ethyleneoxy) ethanol, and ~~Igepal CA-630~~ tert-octylphenoxy poly(oxyethylene)ethanol can be used each at a concentration of about 0.1%. Alternatively, if detergent remains in the supernatant after dialysis at a concentration that is sufficient to prevent precipitation of the proteins during FS-IEF, then no additional detergent need be added to the supernatant prior to FS-IEF.

A preferred, exemplary FS-IEF protocol involves filtering the dialyzed supernatant described above through an 8 μm filter and bringing the filtrate to a concentration of 6 M urea, 0.5% ~~Triton X-100~~ octylphenol ethylene oxide condensate, 0.5% ~~Triton X-114~~ octylphenoxypoly (ethyleneoxy) ethanol, 0.5% ~~Igepal CA-630~~ tert-octylphenoxy poly(oxyethylene)ethanol, and 5% ampholytes (in the ratio of 2 parts pH 5-8 and 1 part pH 3-10). A high concentration of detergent, urea, and ampholytes is preferred so as to maintain protein solubility during IEF or FS-IEF.

Please replace the paragraph on page 28, lines 6-35, with the following paragraph:

In vivo-grown tumor tissue was homogenized at 4° C using a motor-driven glass-Teflon homogenizer; the buffer was 10 mM Tris-Cl (pH 7.4)/ 10 mM NaCl, 0.1% ~~Triton X-100~~ octylphenol ethylene oxide condensate/ 0.1% ~~Triton X-114~~ octylphenoxypoly (ethyleneoxy) ethanol/ 0.1% ~~Igepal CA-630~~ tert-octylphenoxy poly(oxyethylene)ethanol (equivalent to Nonidet P-40), with the following protease inhibitors (Roche Molecular Biochemicals, Indianapolis, IN, USA): leupeptin (2 mg/ml), pepstatin A (1 mg/ml), phenylmethylsulfonyl fluoride (PMSF, 0.5 mM) and a "Complete" protease inhibitor cocktail tablet. This buffer was chosen for its low ionic strength and ability to solubilize membranes. The homogenate was centrifuged at 10,000 x g for 30 min at 4° C, and the supernatant was collected. The "low speed" supernatant was centrifuged at 100,000 x g for 90 min at 4° C to obtain a "high speed" supernatant. This supernatant was dialyzed against 5 mM Tris-Cl (pH 7.4)/ 5 mM NaCl, 0.05% ~~Triton X-100~~ octylphenol ethylene oxide condensate/ 0.05% ~~Triton X-114~~ octylphenoxypoly (ethyleneoxy) ethanol/ 0.05% ~~Igepal CA-630~~ tert-octylphenoxy poly(oxyethylene)ethanol. The dialysate was apportioned and frozen into 5 ml aliquots. One aliquot (approximately 40-50 mg protein) was filtered through a 0.8 μm filter and readied for isoelectric focusing by adding urea to 6 M, the detergents ~~Triton X-100~~ octylphenol ethylene oxide condensate, ~~Triton X-114~~ octylphenoxypoly (ethyleneoxy) ethanol, and ~~Igepal~~ tert-octylphenoxy poly(oxyethylene)ethanol to 0.5% each, ampholytes (2 parts pH 5-8, 1 part pH

3-10 ; Sigma, St. Louis, MO, USA) to 5%, and water to a total volume of 60 ml. The high concentrations of detergents and ampholytes were necessary to maintain protein solubility during isoelectric focusing, as proteins often tend to precipitate at or near their pIs. FS-IEF was carried out in a ROTOFOR® device (Bio Rad Laboratories, Hercules, CA, USA). Isoelectrofocusing was conducted for 4 hrs at 15 W constant power while cooling with recirculating 4°C water; the anode compartment contained 0.1 M H_3PO_4, while the cathode compartment contained 0.1 M NaOH. Twenty fractions were harvested; the pH of each fraction was determined with a standard pH meter, and protein content was analyzed by SDS-PAGE and Western blotting. Following SDS-PAGE proteins were electrotransferred to nitrocellulose and probed with the following primary antibodies specific for each of the chaperone proteins: ~~grp90-spa850~~ grp94-spa850; hsp90-spa830; hsp70-spa820; CRT-spa600 (StressGen Biotechnologies, Victoria, British Columbia, Canada). Secondary antibodies were conjugated with alkaline phosphatase (Chemicon International, Temecula, CA.) Immunoreactive signals were detected by color deposition of the alkaline phosphatase substrate nitroblue tetrazolium/5-bromo-4-chloro-3-indolyl phosphate (Boehringer Mannheim, Indianapolis, IN.) Purification of A20-derived HSP70 was done via conventional and nucleotide affinity chromatography.

Please replace the paragraph from page 36, line 30 to page 37, line 2, with the following paragraph:

A mixture of ROTOLYTE® (Bio Rad Laboratories, Hercules, CA.) buffers was prepared by stirring 5 mls of each buffer in an Erlenmeyer flask. The buffers consisted of the following ROTOLYTES® (Bio Rad Laboratories, Hercules, CA.): pH 3.9-4.6 A and B; pH 4.1-6.5 A and B; pH5.4-6.8 A and B. Twenty one point six grams of USP grade urea (6M) (Sigma) was slowly added to the buffers and stirred until the urea has completely dissolved. Once the urea has dissolved, the solution was brought to a concentration of 0.4% for each of the following detergents: ~~Triton X-100~~ octylphenol ethylene oxide condensate, ~~Triton X-114~~ octylphenoxypoly (ethyleneoxy) ethanol, and ~~Igepal CA-630~~ tert-octylphenoxy poly(oxyethylene)ethanol. The addition of the detergents prevented precipitation of the proteins.